

PATENT COOPERATION TREATY

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INTERNATIONAL SEARCHING AUTHORITY

To:

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PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/GB2005/001143

International filing date (day/month/year)
21.03.2005

Priority date (day/month/year)
22.03.2004

International Patent Classification (IPC) or both national classification and IPC
E05B39/00, G09F3/03, E05B47/00, E05B67/22, E05B65/16

Applicant
MAPLE, Alan James

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2005/001143

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2005/001143

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-18
	No: Claims	
Inventive step (IS)	Yes: Claims	1-18
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-18
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item VIII

Certain observations on the international application

1. The present application does not meet the requirements of Article 6 PCT, because the subject-matter of claim 1 is not clear for the following reasons:

1.1 It is clear from the description and the drawings, that the "component" (see claim 1, line 1) is an essential element to the definition of the invention for providing the "sealing function" of the lock mechanism (see page 2, lines 6-9: a lock mechanism having a sealing arrangement). Furthermore it is not defined in claim 1 that the "component" serves as a seal arrangement (see page 3, lines 21, 22).

For establishing the present written opinion with regard to novelty, inventive step and industrial applicability it has been interpreted that the "component" forms part of the claimed subject-matter of claim 1 (see also claim 13), and in particular that:

- the lock mechanism includes a sealing component suitable for securing the doors of a goods compartment (see page 3, lines 10-13)

1.2 The expression "to effect sealing of the lock mechanism" (see claim 1, lines 23, 24) is not clear (Art. 6 PCT), because it is not indicated how the sealing of the lock mechanism is achieved. For establishing the present written opinion with regard to novelty, inventive step and industrial applicability it has been interpreted that:

- "... the control unit being responsive to an external signal to effect sealing of the lock mechanism by setting the control unit to a sealed status ..." (see page 11, lines 13, 14).

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

2. Reference is made to the following documents:

- D1: US-A-5 876 076 (KOSKY ET AL) 2 March 1999 (1999-03-02)
D2: GB-A-2 353 425 (ALAN JAMES MAPLE) 21 February 2001 (2001-02-21)
D3: US-A-4 766 419 (HAYWARD ET AL) 23 August 1988 (1988-08-23)
D4: BE-A-1 012 7996 (MANSHOVEN HUGO) 6 March 2001 (2001-03-06)
D5: GB-A-2 144 483 (WAITROSE LIMITED) 6 March 1985 (1985-03-06)

3. Independent claim 1.

- 3.1 Document D1 (see col. 8, line 22- col. 9, line 61; Fig. 5-7) which is considered to represent the most relevant state of the art for the subject-matter of claim 1, discloses (the references in parentheses applying to this document):

A lock mechanism including a sealing component (102) suitable for securing the doors of a goods compartment, whereby the component can be locked by the mechanism and is securable to the lock mechanism or is releasable therefrom, which lock mechanism comprises:

- a housing (110) having a bore in which is slidably received a retaining member (108) movable between a first position (Fig. 5) where the retaining member (108) may be engaged with said component (102) and a second position where the retaining member (108) is disposed deeper in the bore and cannot be disengaged from said component (102);
- a catch member (130) movable between active and inactive positions, the catch member (130) being in its inactive position when the retaining member (108) is in its first position (Fig. 5) but on moving the retaining member (108) to its second position the catch member (130) moves to its active position engaged with the retaining member (108) to hold the retaining member (108) in its second position, until the catch member (130) is moved back to its inactive position again to free the retaining member (108) for movement to its first position;
- an indicator (146) for indicating the locking condition of the mechanism and having at least two indicating states

- 3.2 From this, the subject-matter of independent claim 1 differs in that the locking mechanism also comprises:

- an auxiliary lock for the retaining member which auxiliary lock is operable to hold the retaining member in its second position irrespective of operation of the catch member to its inactive position;
- an electronic control unit driving the indicator, the catch member controlling an input to the control unit to indicate when the catch member is in its active position, and the control unit being responsive to an external signal to effect sealing of the lock mechanism by setting the control unit to a sealed status and to operate the auxiliary lock, whereby a first indicating state of the indicator may show whether sealing of the lock mechanism is intact and a second indicating state may show whether an attempt has been made to release the lock mechanism since the lock mechanism was last sealed.

3.3 The subject-matter of claim 1 is therefore novel (Article 33(2) PCT)

4. The problem to be solved by claim 1 may be regarded as:

- providing a lock mechanism having a sealing arrangement which is capable of giving a greater degree of security than can be achieved with known locks (see page 2, lines 6-9) and capable of giving a more reliable sealing indication.

4.1 The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT), since the provision of the remote operated auxiliary lock for additionally locking the retaining member (independently of the catch member) provides a greater degree of security which is not known in the cited prior art documents (see D1-D5).

Furthermore, according to the invention, the indicator can give a more reliable sealing indication of the lock mechanism, since there are two different control signals respectively associated with the operation of the catch member and the auxiliary lock.

- 5. Claims 2-18 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.
- 6. Claims 1-19 are industrially applicable (Art. 33(4) PCT) in the field of locks.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB2005/001143
